ATTACHMENT H – PRIORITY POLLUTANT MONITORING REQUIREMENTS

The Discharger shall conduct effluent monitoring for the priority pollutants (except for 2,3,7,8-TCDD) as described below.

This monitoring shall occur at the following locations:

- Internal Discharge Points. Cooling tower blowdown (Discharge Points I-002 and I-004) only for priority pollutants added for cooling tower maintenance.
- Combined Flow Discharge Point. IBCS effluent (Discharge Point MC-001A).

I. In order to determine compliance with the effluent limitations established at internal Discharge Points I-002 and I-004, the Discharger shall conduct annual priority pollutant monitoring for priority pollutants used for cooling tower maintenance as specified in Attachment E for the priority pollutants contained in *Table 1. Priority Pollutants*.

II. In addition to the annual effluent compliance monitoring at Internal Discharge Points I-002 and I-004, the Discharger shall conduct the two priority pollutant monitoring studies at Combined Discharge Point MC-001A of the parameters in *Table 1. Priority Pollutants*. Further, the Discharger must analyze the pH of the receiving water concurrent with the analysis for the priority pollutants. Quarterly priority pollutant monitoring shall be conducted during the first year of facility operation (four monitoring events). The results of the quarterly priority pollutant monitoring shall be submitted to this Regional Water Board within 3 months of completing the fourth monitoring event, and no later than November 1, 2006.

III. The second priority pollutant monitoring study shall include a single monitoring event at the Combined Discharge Point MC-001A, approximately one year prior to the permit expiration date as established in Section VI.C.2.b. of the Waste Discharge Requirements. The Discharger must analyze the pH of the receiving water concurrent with this analysis for the priority pollutants. The final priority pollutant monitoring event shall be conducted between March 1, 2009 and April 31, 2009 and include Phase II effluent if possible. The results of the second priority pollutant monitoring study shall be submitted to the Regional Water Board at least 180 days prior to the expiration date of this Order and shall be submitted with the Report of Waste Discharge.

IV. The Discharger shall conduct effluent monitoring for 2,3,7,8 TCDD, once during the term of the Order (between March 1, 2009 and April 31, 2009) and submit the results with the Report of Waste Discharge, a minimum of 180 days prior to the expiration date of this Order. The Discharger is required to calculate Toxic Equivalence (TEQ) for each congener by multiplying its analytical concentration by the appropriate Toxicity Equivalence Factors (TEF) provided in *Table 2. Toxicity Equivalence Factors*.

Table 1. Priority Pollutants.

Constituent	Units	Type of Sample
pH	Standard units	Grab
Hardness (as $CaCO_3$)	mg/L	Grab
Salinity	g/L	Grab
Antimony	µg/L	Grab
Arsenic [2]	µg/L	Grab
Beryllium	µg/L	Grab
Cadmium [2]	µg/L	Grab
Chromium III [2]	µg/L	Grab
Chromium VI [2]	µg/L	Grab
Copper [2]	µg/L	Grab
Lead [2]	µg/L	Grab
Mercury	µg/L	Grab
Nickel[2]	µg/L	Grab
Selenium	µg/L	Grab
Silver [2]	µg/L	Grab
Thallium	µg/L	Grab
Zinc [2]	µg/L	Grab
Cyanide	µg/L	Grab
Asbestos	Fibers/L	Grab
Acrolein	µg/L	Grab
Acrylonitrile	µg/L	Grab
Bromoform	µg/L	Grab
Carbon Tetrachloride	µg/L	Grab
Chlorobenzene	µg/L	Grab
Chlorodibromomethane (Dibromochloromethane)	µg/L	Grab
Chloroethane	µg/L	Grab
2-Chloroethylvinyl ether	µg/L	Grab
Chloroform	µg/L	Grab
Dichlorobromomethane (Bromodichloromethane)	µg/L	Grab
1,1-Dichloroethane	µg/L	Grab
1,2-Dichloropropane	µg/L	Grab
1,3-Dichloropropylene	µg/L	Grab
Methyl Bromide (Bromomethane)	µg/L	Grab
Methyl Chloride (Chloromethane)	µg/L	Grab
Methylene Chloride	µg/L	Grab
1,1,2,2-Tetrachloroethane	µg/L	Grab

Constituent	Units	Type of Sample
1,1,2-Trichloroethane	µg/L	Grab
Vinyl Chloride	µg/L	Grab
1,2-Dichlorobenzene	µg/L	Grab
1,3-Dichlorobenzene	µg/L	Grab
1,4-Dichlorobenzene	µg/L	Grab
2-Chlorophenol	µg/L	Grab
2,4-Dichlorophenol	µg/L	Grab
2,4-Dimethylphenol	µg/L	Grab
2-Methyl- 4,6-Dinitrophenol	µg/L	Grab
2,4-Dinitrophenol	µg/L	Grab
2-Nitrophenol	µg/L	Grab
4-Nitrophenol	µg/L	Grab
3-Methyl 4-Chlorophenol	µg/L	Grab
Pentachlorophenol	µg/L	Grab
Phenol	µg/L	Grab
2,4,6-Trichlorophenol	µg/L	Grab
Acenaphthene	µg/L	Grab
Acenaphthylene	µg/L	Grab
Anthracene	µg/L	Grab
Benzidine	µg/L	Grab
Benzo(a)Anthracene	µg/L	Grab
Benzo(a)Pyrene	µg/L	Grab
Benzo(b)Fluoranthene	µg/L	Grab
Benzo(ghi)Perylene	µg/L	Grab
Benzo(k)Fluoranthene	µg/L	Grab
Bis(2-Chloroethoxy)Methane	µg/L	Grab
Bis(2-Chloroethyl)Ether	µg/L	Grab
Bis(2-Chloroisopropyl)Ether	µg/L	Grab
Bis(2-Ethylhexyl)Phthalate	µg/L	Grab
4-Bromophenyl Phenyl Ether	µg/L	Grab
Butylbenzyl Phthalate	µg/L	Grab
2-Chloronaphthalene	µg/L	Grab
4-Chlorophenyl Phenyl Ether	µg/L	Grab
Chrysene	µg/L	Grab
Dibenzo(a,h)Anthracene	µg/L	Grab
3,3 Dichlorobenzidine	µg/L	Grab
Diethyl Phthalate	µg/L	Grab
Dimethyl Phthalate	µg/L	Grab
Di-n-Butyl Phthalate	µg/L	Grab
2,4-Dinitrotoluene	µg/L	Grab

Constituent	Units	Type of Sample
2,6-Dinitrotoluene	µg/L	Grab
Di-n-Octyl Phthalate	µg/L	Grab
1,2-Diphenylhydrazine	µg/L	Grab
Fluoranthene	µg/L	Grab
Fluorene	µg/L	Grab
Hexachlorobenzene	µg/L	Grab
Hexachlorobutadiene	µg/L	Grab
Hexachlorocyclopentadiene	µg/L	Grab
Hexachloroethane	µg/L	Grab
Indeno(1,2,3-cd)Pyrene	µg/L	Grab
Isophorone	µg/L	Grab
Naphthalene	µg/L	Grab
Nitrobenzene	µg/L	Grab
N-Nitrosodimethylamine	µg/L	Grab
N-Nitrosodi-n-Propylamine	µg/L	Grab
N-Nitrosodiphenylamine	µg/L	Grab
Phenanthrene	µg/L	Grab
Pyrene	µg/L	Grab
1,2,4-Trichlorobenzene	µg/L	Grab
Aldrin	µg/L	Grab
alpha-BHC (hexachloro-cyclohexane)	µg/L	Grab
beta-BHC	µg/L	Grab
gamma-BHC	µg/L	Grab
delta-BHC	µg/L	Grab
Chlordane	µg/L	Grab
4,4'-DDT	µg/L	Grab
4,4'-DDE (linked to DDT)	µg/L	Grab
4,4'-DDD	µg/L	Grab
Dieldrin	µg/L	Grab
alpha-Endosulfan	µg/L	Grab
beta-Endolsulfan	µg/L	Grab
Endosulfan Sulfate	µg/L	Grab
Endrin	µg/L	Grab
Endrin Aldehyde	µg/L	Grab
Heptachlor	µg/L	Grab
Heptachlor Epoxide	µg/L	Grab
PCBs sum[3]	µg/L	Grab
Toxaphene	µg/L	Grab

[1]Monitoring and analysis for pH, hardness, and salinity is required for receiving water only.

[2] Measured as total recoverable.
[3] PCBs sum refers to sum of PCB Arochlors 1016, 1221, 1232, 1242, 1248, 1254, and 1260

Table 2. Toxicity Equivalence Factors

Congeners	TEF
2,3,7,8-Tetra CDD	1.0
1,2,3,7,8-penta CDD	1.0
1,2,3,4,7,8-hexa CDD	0.1
1,2,3,6,7,8-hexa CDD	0.1
1,2,3,7,8,9-hexa CDD	0.1
1,2,3,4,6,7,8-hepta CDD	0.01
Octa CDD	0.0001
2,3,7,8-tetra CDF	0.1
1,2,3,7,8 penta CDF	0.05
2,3,4,7,8-penta CDF	0.5
1,2,3,4,7,8-hexa CDF	0.1
1,2,3,6,7,8-hexa CDF	0.1
1,2,3,7,8,9-hexa CDF	0.1
2,3,4,6,7,8-hexa CDF	0.1
1,2,3,4,6,7,8-hepta CDF	0.01
1,2,3,4,7,8,9-hepta CDF	0.01
Octa CDF	0.0001

Please note that the report for 2,3,7,8 TCDD and the final priority pollutant study is must be submitted with the Report of Waste Discharge and submitted to the Regional Water Board as an attachment to the Report of Waste Discharge no later than 180 days prior to the expiration date of Order No. R9-2005-0139.